



VISION Rechargeable Products
Sealed Lead Acid Battery

www.vision-batt.com

HP&HF Series

High Rate Discharge

The new VISION HP/HF series batteries are specially designed for applications where need high power output. By optimum design of battery grids and platepaste formula, the HP/HF series can deliver up to 40% more power than VISION standard CP/FM series.

Shenzhen Center power tech co., ltd has more than 15 year's experience in the manufacturing of VRLA batteries. SZCPT is one of the biggest manufacturers of SLA (or VRLA) batteries in the world, the biggest one in Mainland China and the first in China to develop and commercialize the sealed lead-acid battery with brand name VISION and has been at the forefront of battery technology from day one.

SZCPT leads the world in innovative battery technology. Our global network of sales and service engineers, backed in turn by our agents and distributors, means that we are currently active in more than 100 countries.

Shenzhen Center Power Tech. Co., Ltd

HF12-320W-X 12V 75Ah

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General Features

- Positive and negative plates in lead-calcium tin alloy
- Superior energy density
- Operates at a low internal pressure.
- Gas Recombination
- Usable in any orientation
- A recognized component of UL
- Very high power output
- Application specific designs
- A couple Range from 13W to 890W per cell for 10' @ 1.60Vpc
- Six months shelf life at 20°C
- Design life 10 years



Dimensions and Weight

	SI Units	English Units
Length	258mm	10.2inch
Width	166mm	6.54inch
Height	206mm	8.11inch
Total Height	215mm	8.46inch
Approx. Weight	24.0Kg	52.9lbs

Performance Characteristics

- Nominal Voltage 12V
- Number of cell 6
- Nominal Capacity 68°F(20°C)
 - 10 min wattage @ 1.6V320W/cell
 - 10 hour rate (7.41A, 10.5V) 74.1Ah
- Nominal Capacity 77°F(25°C)
 - 10 hour rate (7.50A, 10.8V) 75Ah
- Internal Resistance
 - Fully Charged battery 68°F(20°C) 5.2mOhms
- Self-Discharge
 - 3% of capacity declined per month at 20°C(average)
- Operating Temperature Range
 - Discharge -20~60°C
 - Charge -10~60°C
 - Storage -20~60°C
- Max. Discharge Current 68°F(20°C) 700A(5s)
- Charge Methods: Constant Voltage Charge 68°F(20°C)
 - Cycle use 14.5-14.7V
 - Maximum charging current 22.5A
 - Temperature compensation -30mV/°C
- Standby use 13.6-13.8V
 - Temperature compensation -20mV/°C



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Discharge Data

Constant Current Discharge Data (Ampere at 20 °C)																													
End Voltage Volts/Cell	5min	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	60min	1.25h	1.5h	1.75h	2h	2.25h	2.5h	2.75h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.60	233	177	139	115	100	90.0	79.9	72.3	66.5	61.3	57.1	53.5	44.0	37.6	33.3	29.6	26.9	24.9	23.2	21.7	17	14.1	12.2	10.8	9.8	9	8.36	7.2	3.66
1.65	219	167	132	109	94.7	85.3	75.9	68.8	63.2	58.4	54.4	51.1	42.3	35.9	32.1	28.3	25.9	23.8	22.3	20.8	16.2	13.5	11.7	10.4	9.42	8.65	8.05	6.95	3.54
1.70	205	157	125	103	89.6	80.7	71.8	65.2	60.0	55.4	51.7	48.6	40.6	34.2	30.8	27.0	24.9	22.7	21.5	19.8	15.5	13	11.2	10	9.04	8.31	7.73	6.69	3.42
1.75	191	148	118	96.8	84.4	76.1	67.8	61.6	56.8	52.5	49.0	46.1	38.9	32.5	29.6	25.7	23.9	21.6	20.6	18.9	14.8	12.4	10.7	9.55	8.66	7.97	7.41	6.43	3.29
1.80	183	142	114	93.8	82.0	74.1	66.1	60.1	55.4	51.3	47.9	45.1	37.1	31.8	28.3	25.2	22.9	21.2	19.8	18.5	14.6	12.2	10.5	9.38	8.51	7.84	7.3	6.34	3.25

Constant Power Discharge Data (Watts at 20 °C)																													
End Voltage Volts/Cell	5min	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	60min	1.25h	1.5h	1.75h	2h	2.25h	2.5h	2.75h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.60	433	320	248	200	172	153	137	125	116	107	100	94.2	78.3	67.7	60.6	54.5	49.8	46.5	43.4	41.2	33	28.1	24.3	21.7	19.6	18.1	16.8	14.5	7.8
1.65	415	308	239	194	166	148	133	121	112	104	97.2	91.6	76.2	65.9	59.0	53.0	48.5	45.3	42.3	40.2	32.3	27.5	23.8	21.2	19.2	17.7	16.4	14.2	7.67
1.70	396	296	230	187	161	143	128	117	109	101	94.4	89.0	74.0	64.1	57.4	51.6	47.2	44.1	41.2	39.2	31.5	26.9	23.3	20.7	18.8	17.3	16.1	13.9	7.55
1.75	378	284	222	180	155	138	124	114	105	97.8	91.6	86.4	71.9	62.3	55.8	50.2	45.9	43.0	40.1	38.1	30.7	26.2	22.7	20.2	18.4	16.9	15.8	13.7	7.42
1.80	359	272	213	173	149	133	120	110	102	94.7	88.8	83.8	69.7	60.5	54.2	48.8	44.6	41.8	39.0	37.1	29.9	25.6	22.2	19.8	18	16.5	15.4	13.4	7.29

(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.

Performance drawings

